

P-399 - THE IMPLEMENTATION OF EEG BIOFEEDBACK TRAININGS IN THE TREATMENT OF PATIENTS WITH ORGANIC COGNITIVE DISORDERS

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Aim: The aim of this paper is to determine the effect of EEG Biofeedback training in order to improve cognitive functions of patients with organic cognitive disorders confirmed in imaging and psychological studies.

Materials: Data used in the paper were collected from patients detailed medical history about laboratory tests, imaging, neurological (including EEG) and psychological. The diagnostic tests have been performed as well as set of psychological tests:

Wechsler Intelligence Tests WAIS - R

Trail-Making Test: TMT A, TMT B

With no negative factors certified, the patient was put in the EEG Biofeedback (Brain Feedback III ver. 10.09 - 3D) training session and then was classified to EEG Biofeedback trainings. The trainings took place 3 times a week (10 sessions for 3 minutes, in the left hemisphere).

In the trainings the focus was on the bioelectric activity of beta and delta waves.

Results: The patient performed 52 out of 60 sessions of EEG Biofeedback.

Throughout the whole training the variations could be observed in the beta wave amplitude, which was connected to the variable patient motivation (decreased motivation after hospitalization).

After the set of psychological tests containing psychoorganic tests no improvement of cognitive functions were observed.

This result is negatively correlated with the subjective feeling of the patient.

Conclusions: We conducted a preliminary study, despite the progression of beta waves showed no significant effect after 60 training EEG Biofeedback for improvement in cognitive function. We have obtained preliminary results that will be reviewed after a course of 90 sessions.